Product/Service Description Document
Avalanche Weather Guidance (AVG)
September 2021

Part I - Mission Connection

a. Product Description – During the winter of 2020-2021, the experimental Avalanche Weather Guidance (AVG) product was produced at select Weather Forecast Offices (WFOs) across the United States. This season, beginning on or about November 1, 2021, the NWS is expanding the scope of the product to include 27 WFOs. Other changes include improving the display to allow for variable time resolution and providing both a 12-hour and 24-hour clock. These changes were made based on user feedback. This experimental AVG will be available as a text-based product via NWS web pages and other NWS dissemination systems.

   The WFOs, in coordination with any federal, state, or National Avalanche Center recognized non-profit Avalanche Centers or other avalanche partners within their County Warning Areas (CWAs), will select which points or areas that shall be included in the AVG product.

b. Product Type – Experimental.

c. Purpose – The experimental AVG provides the local avalanche centers with forecast meteorological parameters critical to the center's forecasts of avalanche conditions. The forecasts are also used by state and local departments of transportation, emergency management, search and rescue operations, commercial entities, recreation areas, and backcountry enthusiasts in helping them prepare for weather conditions that they should expect to encounter in avalanche prone areas.

d. Audience – The forecasts will be available for use by core partners and the general public, including the avalanche centers.

e. Presentation Format – The experimental AVG will be available as a text-based product via NWS web pages and other NWS dissemination systems. The 27 offices that will be creating the product are:

WFO	WMO Header	AWIPS ID
Albuquerque	FWUS45 KABQ	AVGABQ
Great Falls	FWUS45 KTFX	AVGTFX
Missoula	FWUS45 KMSO	AVGGPI, AVGMSO
Pendleton	FWUS46 KPDT	AVGPDT
Pocatello	FWUS45 KPIH	AVGPIH
Reno	FWUS45 KREV	AVGREV
Riverton	FWUS45 KRIW	AVGRIW
Burlington	FWUS41 KBTV	AVGBTV
Gray	FWUS41 KGYX	AVGGYX
Boulder	FWUS45 KBOU	AVGBOU
Grand Junction	FWUS45 KGJT	AVGGJT
Pueblo	FWUS45 KPUB	AVGPUB

Billings	FWUS45 KBYZ	AVGBYZ
Boise	FWUS45 KBOI	AVGBOI
Elko	FWUS45 KLKN	AVGLKN
Flagstaff	FWUS45 KFGZ	AVGFGZ
Hanford	FWUS46 KHNX	AVGHNX
Las Vegas	FWUS45 KVEF	AVGVEF
Medford	FWUS46 KMFR	AVGMFR
Oxnard	FWUS46 KLOX	AVGLOX
Portland	FWUS46 KPQR	AVGPQR
Salt Lake City	FWUS45 KSLC	AVGSLC
Seattle	FWUS46 KSEW	AVGSEW
Spokane	FWUS46 KOTX	AVGOTX
Anchorage	FWAK48 PAFC	AVGAFC
Fairbanks	FWAK49 PAFG	AVGAFG
Juneau	FWAK47 PAJK	AVGAJK

f. Feedback Method – The NWS is seeking comments on the Experimental AVG products through April 30, 2022 via the on-line survey at:

https://www.surveymonkey.com/r/AvalancheWeatherGuidance2021-2022

Questions or comments regarding the experimental Avalanche Weather Guidance product should be directed to:

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After the comment and review period has ended, an assessment will be made to determine the next steps for the AVG products for the 2022-2023 winter season.

Part II – Technical Description

a. Format & Science Basis – The experimental AVG product will be issued at least once per day for a period of 48 hours at 1-, 3-, 6-, or 12-hourly resolution during the winter season. The WFOs should work with their partners to determine preferred sites or areas and preferred time resolution for the product. The forecast elements that will be included in the product are: temperatures, maximum and minimum temperatures, weather, probability of precipitation, snowfall, liquid or snow-water equivalent, ice accumulation

(optional), snow levels (with the exception of Eastern Region WFOs), wind direction, wind, wind gusts, and cloud cover. Offices can include forecast elements beyond the required minimum. A narrative discussion at the top of the product is optional. The format of the AVG product will be as follows:

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Avalanche Weather Guidance Product
National Weather Service XXX XX
430 AM MDT Fri Apr 10 2021

.DISCUSSION...OPTIONAL

**********XXXX AREA FORECAST**********
...XXX Mtn...

Date               Today 04/10             Saturday 04/11
Time (LT)          06 09 12 15 18 21 00 03 06 09 12 15 18 21 00 03 06
                   6a 9a 12 3p 6p 9p 12 3a 6a 9a 12 3p 6p 9p 12 3a 6a

Cloud cover        FW FW FW FW FW FW FW SC SC SC BK BK BK BK BK OV OV
Cloud cover (%)    35 37 38 39 39 39 39 48 51 54 60 65 70 70 71 88 90
Temperature        25 27 28 28 28 27 26 25 26 29 30 31 31 30 29 26 24
Min/Max temp                  29          24          32          23
Wind Dir           NW NW NW NW NW  N  N  N  N  N  N  N NE NE NE NE NE
Wind (mph)         09 08 07 07 08 10 12 13 15 20 21 20 18 17 17 17 17
Wind Gust (mph)    12 14 15 15 15 19 20 20 20 27 29 30 28 26 26 26 27
Precip prob (%)     0  0  0  0  0  0  0 10 10 10 10 10 10 10 10 30 60
Precip type                                              S  S
12 hour QPF             0.00        0.00        0.00        0.05
12 hour Snow                  0.0         0.0         0.0         0.7
12 hour Ice             0.00        0.00        0.00        0.05
Snow level (kft)    6  6  6  6  6  5  5  5  5  5  6  6  7  7  6  5  5
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b. Availability – The experimental AVG product will be issued at least once per day during the winter season, as determined by the WFO.